

# PREVENTIVE MAINTENANCE

## for the

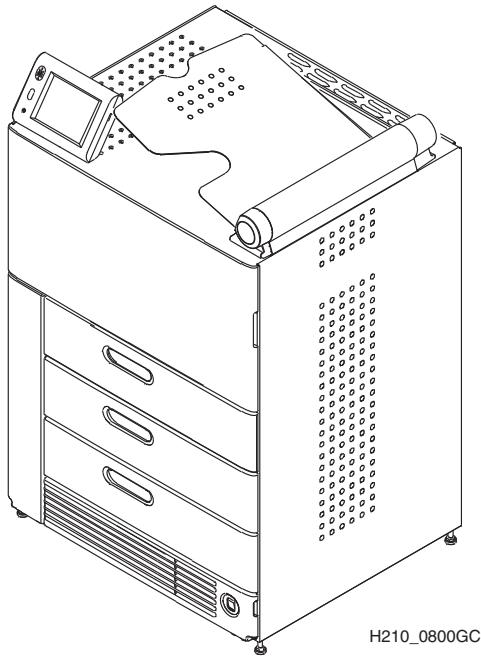
# *Kodak DryView 6800 LASER IMAGER*

## Service Code: 1649



### Important

Qualified service personnel must repair this equipment.



**PLEASE NOTE**

The information contained herein is based on the experience and knowledge relating to the subject matter gained by Carestream Health, Inc., prior to publication.

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This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

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## Necessary Materials

The materials necessary for performing Preventive Maintenance are:

- Tools (see Table 1, [Required Tools](#))
- PM Materials Kit, 2G0295 - required for every PM (see Table 2, [PM Materials - Required for every PM](#))
- PM Spare Parts Kit, 2G0296 - required for every PM (see Table 3, [PM Spare Parts Kit, 2G0296 - Required for every PM](#))
- PM Replacement Parts Kit, 2G0297 - required for PMs at 60,000 cycle intervals (see Table 4, [PM Replacement Parts Kit, 2G0297 - Required for PMs at 60,000 Cycles](#))

**NOTE:** The parts in the Spare Parts Kit do not have to be replaced. They are included in the event that a part is lost or damaged during the PM.

- Publications (see Table 5, [Publications](#))

**Table 1 Required Tools**

Tool No.	Description
---	LAPTOP COMPUTER with <i>Microsoft Windows 98</i> OPERATING SYSTEM or higher and <i>Microsoft INTERNET EXPLORER 5.5</i>
---	SERVICE TOOL for the 6800 LASER IMAGER
TL5568	CROSSOVER CABLE
TL5574	TEMPERATURE METER and PROBE - drum
SP7F3477	BLOCK for PROBE, KIT
TL6500	TEMPERATURE METER KIT- flatbed
TL4071	VACUUM CLEANER
---	FLASHLIGHT
---	SCRAPER
---	GLOVES - heat-resistant
---	Standard tool kit

**Table 2 PM Materials - Required for every PM**

Part No.	Description	Notes
1C8287	ALCOHOL WIPES	<i>Texwipe TX1065 - 50 each; this item should be carried in your custody.</i>
2G0295	KIT, PREVENTIVE MAINTENANCE - includes: <ul style="list-style-type: none"> <li>• SP78801828027 - CLEANING PADS, 4 x 4 in.</li> <li>• SP8F3958 - KIT, PREVENTIVE MAINTENANCE MODULE (PMM), 2</li> <li>• SP78999828680 - BAG with TIE WRAP</li> </ul>	100 each  Install 1 every PM and leave the other one with the customer.  Use as needed.

**Table 3 PM Spare Parts Kit, 2G0296 - Required for every PM**

Part No.	Description	Notes
SP8F1330	BEARING SLEEVE (4)	The parts in this kit do not have to be replaced. They are included in case a part is lost or damaged during the PM.
SP5F7912	BEARING - ball (2)	
SP8F2177	GASKET - duct (1)	
SP8F0091	BELT - drive, thermal processor (1)	
SP8F2850	BELT - drive, cooling (1)	
SP5F8095	SCREWS (5 each)	
SP5F8096 SP5F8099 SP5F8100		

**Table 4 PM Replacement Parts Kit, 2G0297 - Required for PMs at 60,000 Cycles**

Part No.	Description	Notes
SP8F2325	EXHAUST DUCT AY	Install 1 every 60,000 cycles.
SP8F2492	ROLLER - cooling	Install 1 every 60,000 cycles.

**Table 5 Publications**

Publication No.	Publication
8F2916	ADJUSTMENTS AND REPLACEMENTS for the <i>Kodak DryView 6800 LASER IMAGER</i>

**Maintenance Plan****Important**

A Preventive Maintenance (PM) call must be made every 30,000 film cycles.

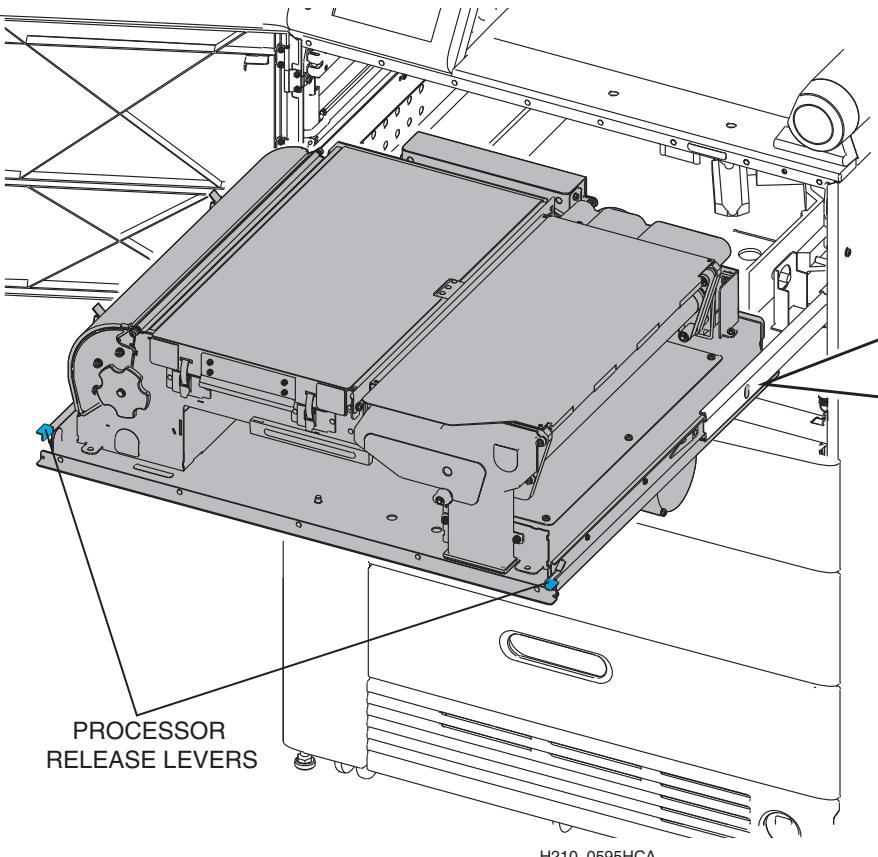
- 30,000 cycle procedures are completed every PM call.
- 60,000 cycle procedures are completed every other PM call.

**Table 6 Preventive Maintenance**

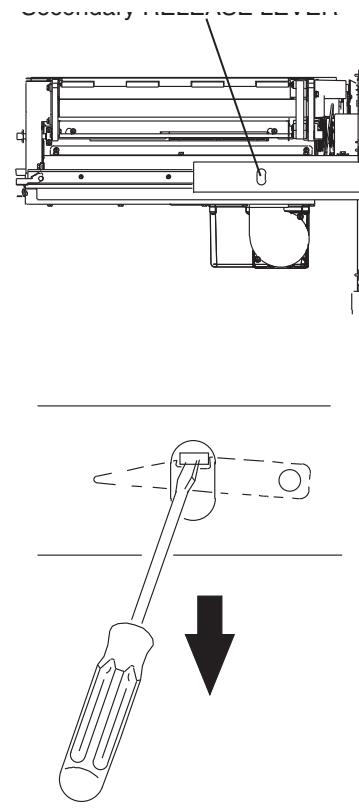
Procedure	30,000 Cycles	60,000 Cycles
<b>Preparing for Preventive Maintenance (PM)</b>	X	X
<b>Installing a New PREVENTIVE MAINTENANCE MODULE (PMM)</b>	X	X
<b>Cleaning the FLATBED</b>	X	X
<b>Cleaning the DRUM, DRUM COVER, and PRESSURE ROLLER AY</b>	X	X
<b>Cleaning the COOLING Section</b>	X	X
<b>Installing a New COOLING ROLLER and EXHAUST DUCT</b>		X
<b>Checking the Operation</b>	X	X
<b>Resetting the PM Counts and Changing the Service History</b>	X	X
<b>Completing the PM</b>	X	X

## Preparing for Preventive Maintenance (PM)

- 1** Obtain the service passcode for the IMAGER from the customer.
- 2** Make a “Flat-field” or “Grayout” test print. On the LOCAL PANEL:
  - a** Touch:
    - DRAWER icon
    - [Test Patterns]
  - b** Select “TG18-UN10”.
  - c** Touch:
    - [Print]
    - [OK]
- 3** Keep the print to compare with a test print that will be run after the PM.
- 4** On the LOCAL PANEL:
  - a.** Touch the “Unlock” icon.
  - b.** Select “Unlock Processor”.
  - c.** Touch [OK].
- 5** Remove the MAIN DOOR.
  - a.** Open the DOOR.
  - b.** Lift the DOOR off the HINGES.



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- 6 Press down on the left and up on the right PROCESSOR RELEASE LEVER.
- 7 Pull the PROCESSOR forward until it stops.

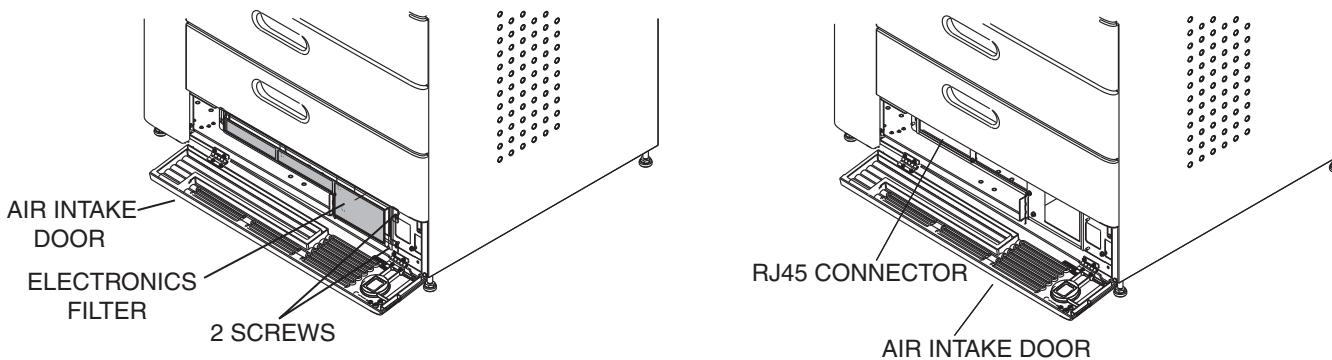
**Important**

For **Step 8** and **Step 9**, use a small flat-bladed SCREWDRIVER to engage the LEVERS.

- 8 Press down on the right side secondary RELEASE LEVER and pull the PROCESSOR about 2.5 cm (1 in.) forward.
- 9 Press up on the left-side secondary RELEASE LEVER and pull the PROCESSOR forward to service position.

**10** Release the 2 LATCHES and raise the FLATBED COVER.**Note**

The DRUM and FLATBED must cool for a minimum of 30 minutes before cleaning.

**Caution**  
Dangerous Voltage**11** Connect the LAPTOP COMPUTER to the IMAGER.

a Open the AIR INTAKE DOOR.

b Remove:

- 2 SCREWS
- ELECTRONICS FILTER

c Connect the LAPTOP COMPUTER to the RJ45 CONNECTOR on the DRE with a CROSSOVER CABLE, TL5568.

**12** Energize the LAPTOP COMPUTER.**13** Log on to the SERVICE TOOL.

- a Select **Start>Programs>Kodak>SecureLink**.
- b Type your password.
- c Click [OK].

- d Type the IP address of the SERVICE PORT: 192.168.000.1
- e Click [Connect].
- f Select **Start>Programs>Kodak>Service WebLink**.

The main menu of the SERVICE TOOL displays.

- 14** Select **System Information>Service History**.
- 15** Check the Service History log to determine if this PM is at the 30,000 or 60,000 film cycles interval, and follow the **Maintenance Plan** as outlined in Table 6, **Preventive Maintenance**.
- 16** Log off from the SERVICE TOOL.
  - a In the upper-right corner of the SERVICE TOOL, click [Log Off].
  - b At the “Kodak Service WebLink” screen, click [Log Off].
  - c Close the “WebLink” Client Software.
  - d At the “Kodak Secure Link 2.1” screen:
    - click [Disconnect]
    - close the screen
- 17** Disconnect the LAPTOP COMPUTER from the IMAGER.
- 18** Press the POWER BUTTON on the LOCAL PANEL.

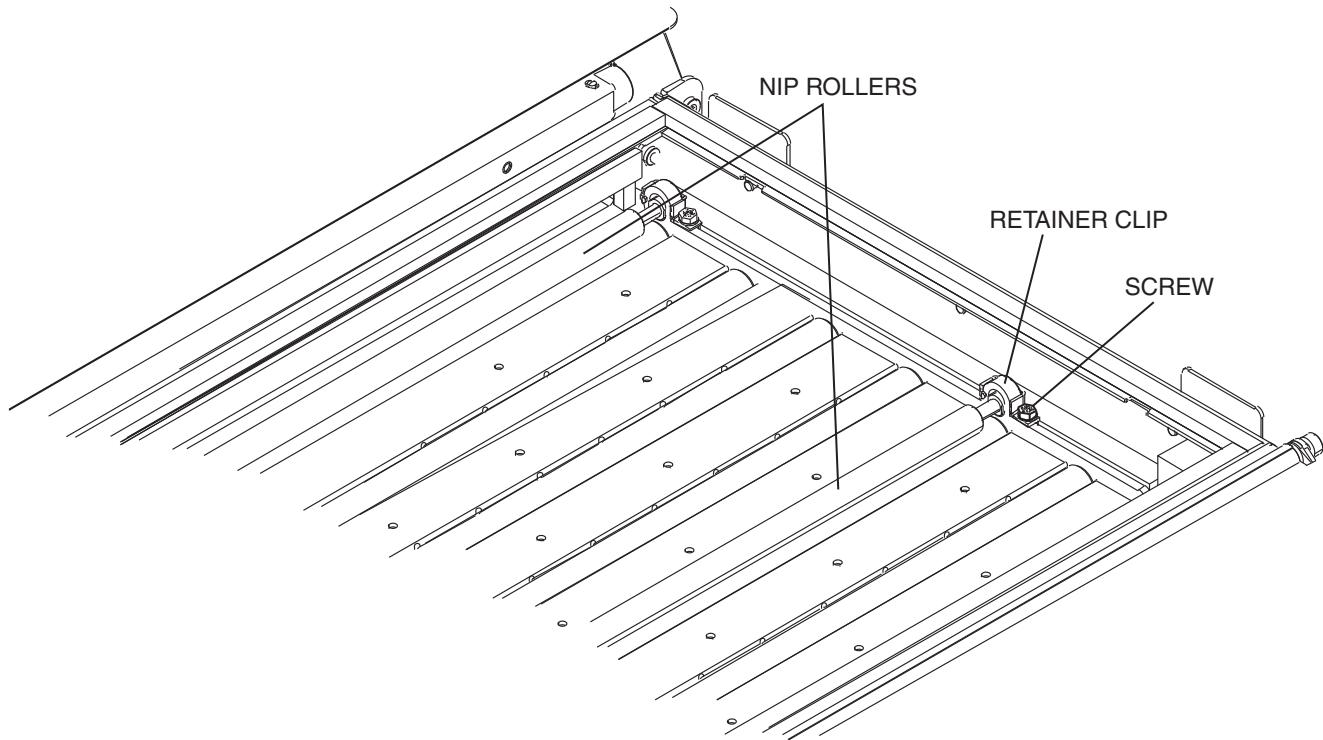
Wait for the “Start Power Save” screen to appear.
- 19** On the LOCAL PANEL, touch:
  - [Power OFF]
  - [OK]
- 20** Disconnect the POWER CORD.
- 21** Remove the PREVENTIVE MAINTENANCE MODULE (PMM).
- 22** Check the inside of the PMM compartment for “snow”. If necessary, vacuum the compartment.
- 23** Vacuum both sides of the ELECTRONICS FILTER.

## Cleaning the FLATBED



### Important

- This procedure should be done while the FLATBED ROLLERS are still warm to the touch.
  - Place used ALCOHOL WIPES in a BAG, SP78999828680.
- 
- 1 Check the underside of the COVER and clean with an ALCOHOL WIPE if necessary.



### Caution

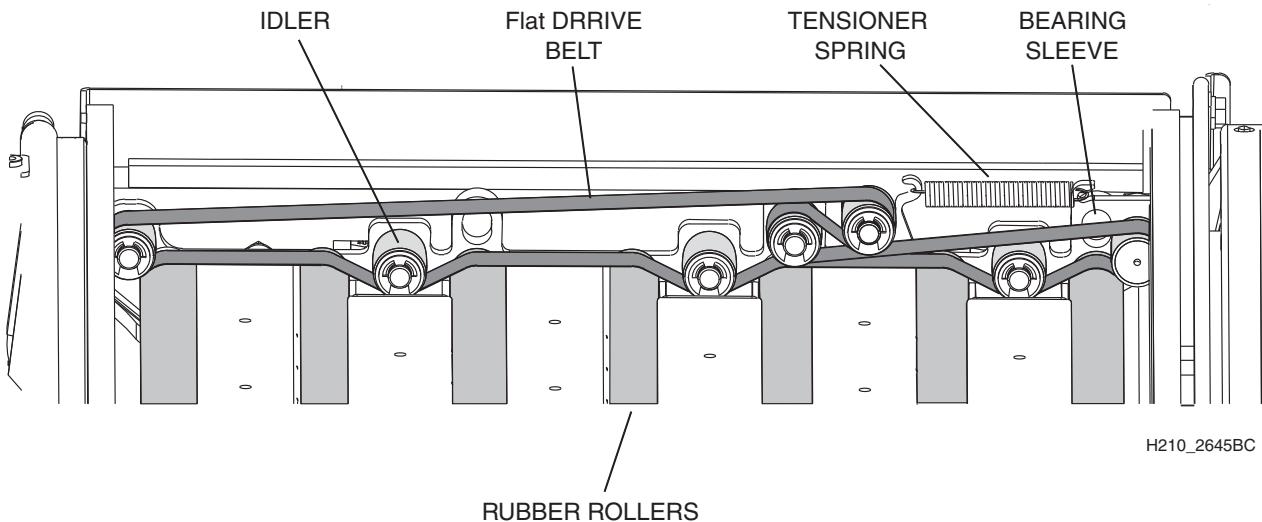
Hot surface. Use the heat-resistant GLOVE to handle the ROLLERS.

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**2 Remove the NIP ROLLER:****Important**

When removing the ROLLER, keep the BEARING SLEEVES on both ends.

- a** Remove the SCREW and RETAINER CLIP.
  - b** Pull the ROLLER forward to disengage the back end.
  - c** Move the back end to one side.
  - d** Disengage the ROLLER from the front and lift it out.
- 3** Clean the NIP ROLLER with an ALCOHOL WIPE.
  - 4** Repeat **Step 2** and **Step 3** for the other NIP ROLLER.



- 5** Disengage the TENSIONER SPRING.
- 6** Remove the flat DRIVE BELT.
- 7** Check the BELT for damage.

**8** Does the BELT have damage?

Yes	No
<ul style="list-style-type: none"><li>• Obtain a new DRIVE BELT, SP8F0091.</li><li>• Advance to <b>Step 10</b>.</li></ul>	Continue with <b>Step 9</b> .

**9** Clean the BELT with an ALCOHOL WIPE.**Important**

When cleaning the RUBBER ROLLERS, also clean the 2 ROLLERS that are under the 2 NIP ROLLERS.

**10** Clean the RUBBER ROLLERS and IDLERS with an ALCOHOL WIPE.**11** Install:

- DRIVE BELT (see BELT PATH LABEL)
- TENSIONER SPRING

**Important**

When installing the NIP ROLLERS, make sure that the BEARING SLEEVES are in place on both ends.

**12** Install the NIP ROLLERS:

- a Position the back end of the ROLLER under the flat DRIVE BELT and to one side.

**Note**

The back end has the longer shaft.

- b Insert the front end of the ROLLER into place.
- c Insert the back end of the ROLLER.
- d Install the RETAINER CLIP and SCREW.

**13** Turn the blue KNOB on the front of the COOLING AY several times to allow the BELT to center itself.

**14 Lower the FLATBED COVER.**



**Note**

Do not engage the LATCHES at this time.

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**15 Do Cleaning the DRUM, DRUM COVER, and PRESSURE ROLLER AY.**

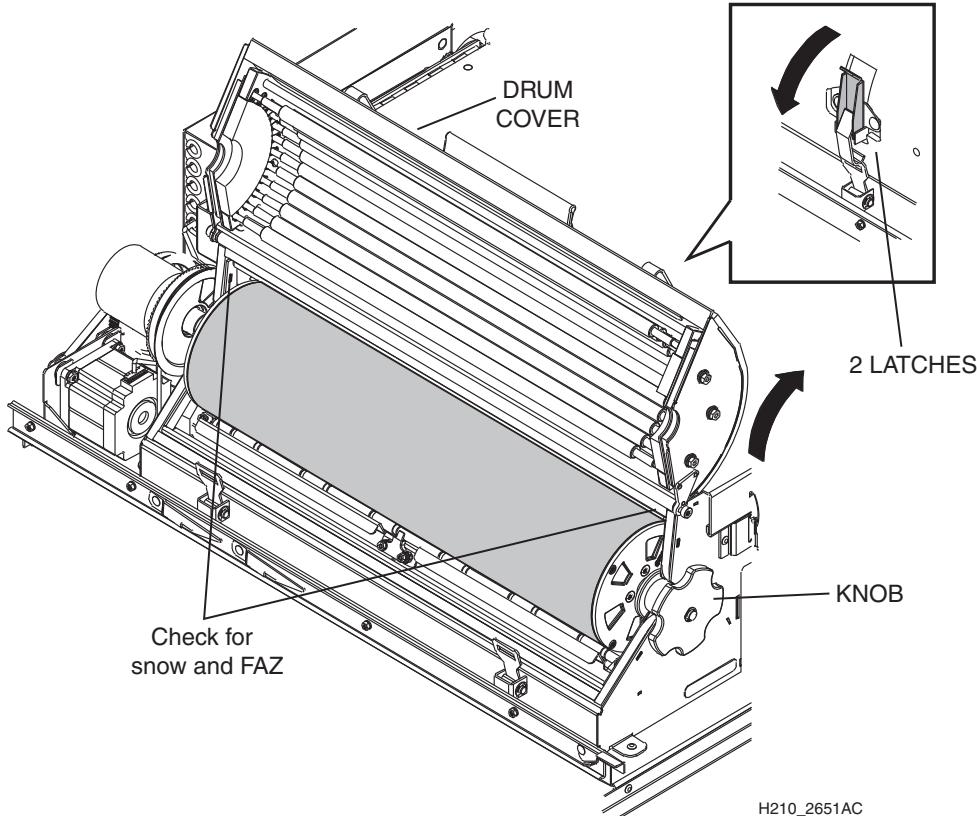
## Cleaning the DRUM, DRUM COVER, and PRESSURE ROLLER AY



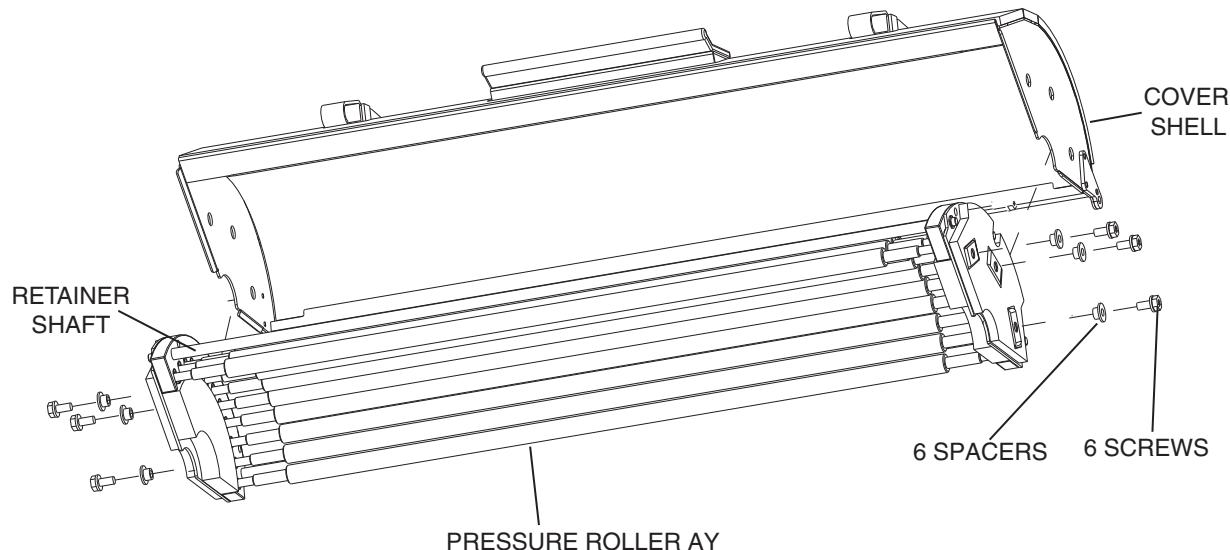
### Important

- This procedure should be done while the DRUM is still warm to the touch.
- Place used ALCOHOL WIPES in a BAG SP78999828680.

**1** Release the 2 LATCHES and raise the DRUM COVER.



- 2** Check the DRUM area for "snow" and FAZ.
- 3** Vacuum "snow", FAZ, and any loose debris.

**Caution**

Hot surface. Use the heat-resistant GLOVE to handle the ROLLERS.

**4 Remove:**

- 6 SCREWS
- 6 SPACERS
- PRESSURE ROLLER AY

**5 Use ALCOHOL WIPES to clean the ROLLERS and RETAINER SHAFTS.****Note**

- Rotate the ROLLERS and RETAINER SHAFTS to clean all sides.
- It may be necessary to use a SCRAPER on the RETAINER SHAFTS. **Do not** use a SCRAPER on the ROLLERS.

**6 Use ALCOHOL WIPES to clean the inside of the COVER SHELL.**

**Important**

When installing the PRESSURE ROLLER AY, make sure that the ROLLER with the SPRINGS on the ends is located at the top of the COVER SHELL.

**7** Install:

- PRESSURE ROLLER AY
- 6 SPACERS
- 6 SCREWS

**8** Use the KNOB to rotate the DRUM and check for damage.**9** Does the DRUM have damage?

Yes	No
<p>a. Install a new DRUM (see ADJUSTMENTS AND REPLACEMENTS, <b>DRUM AY - THERMAL PROCESSOR AY</b>).</p> <p>b. Advance to <a href="#">Step 11</a>.</p>	Continue with <a href="#">Step 10</a> .

**10** Rotate the DRUM using the KNOB and clean the surface with ALCOHOL WIPES.**11** Lower the DRUM COVER.**12** Engage the 2 LATCHES.**13** Do [Cleaning the COOLING Section](#).

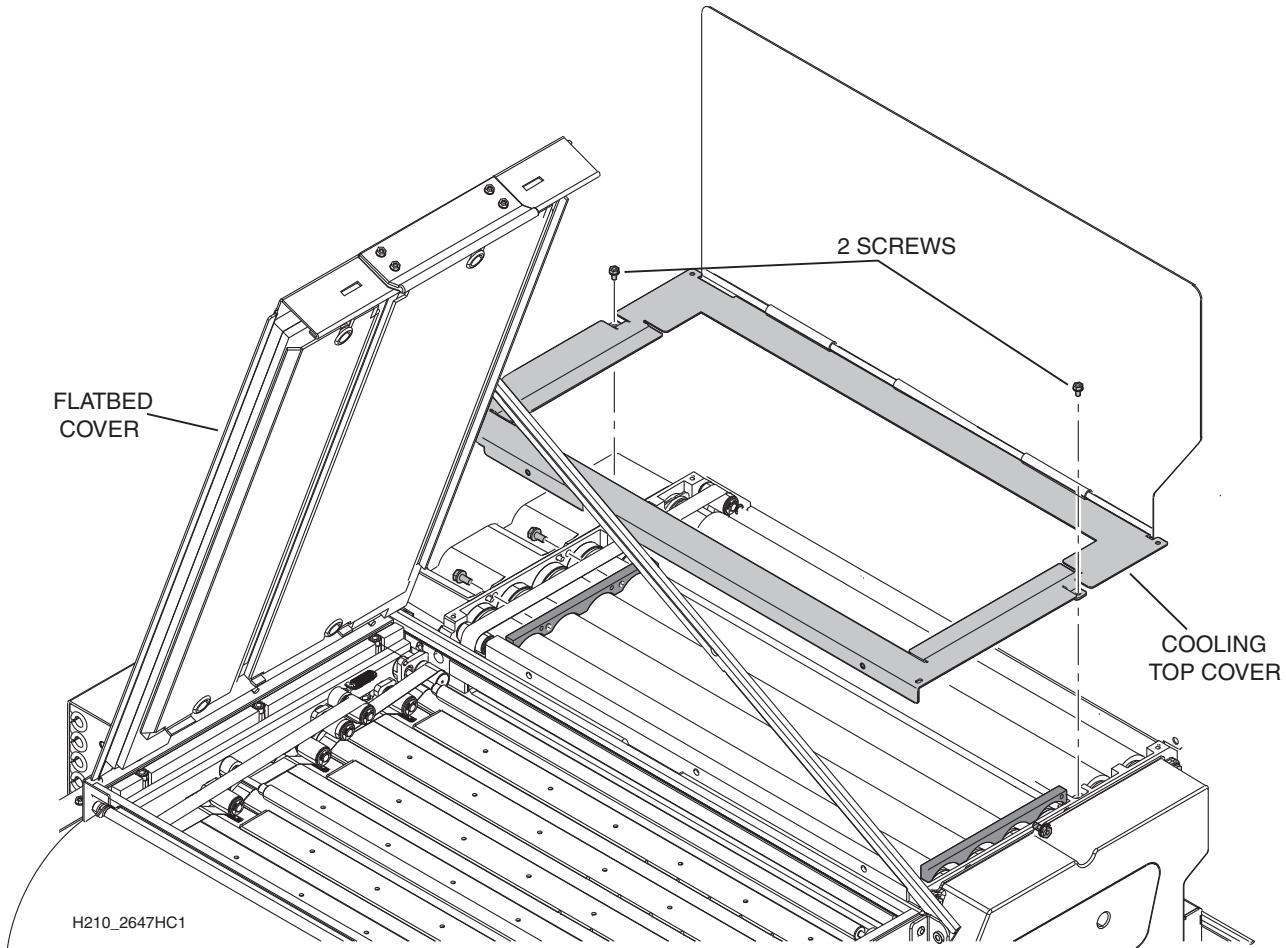
## Cleaning the COOLING Section



### Important

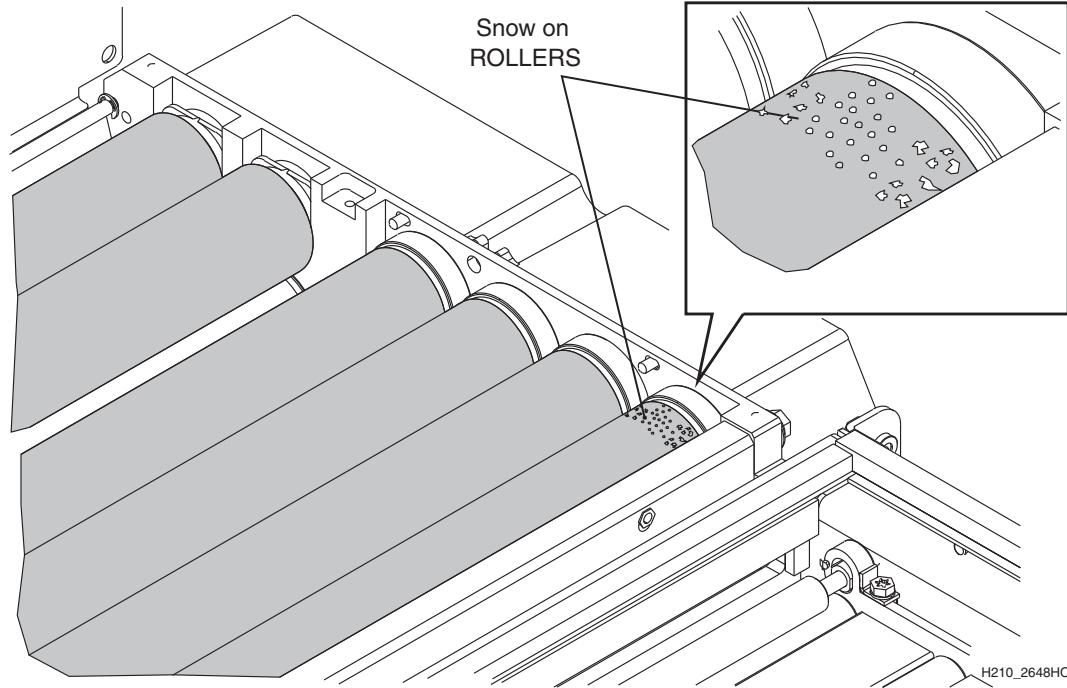
Place used ALCOHOL WIPES in a BAG, SP78999828680.

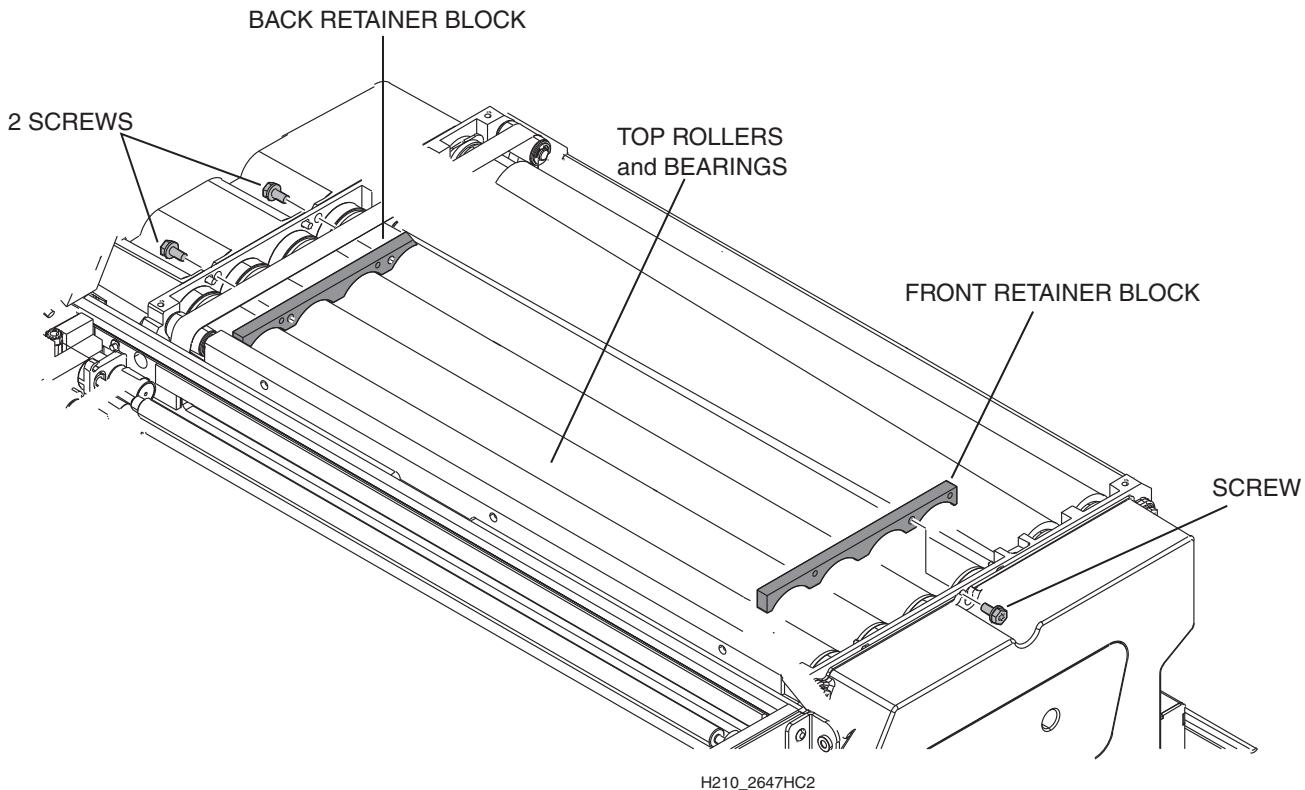
- 1** Raise the FLATBED COVER.
- 2** Open the COOLING AY TOP COVER.



**3 Remove:**

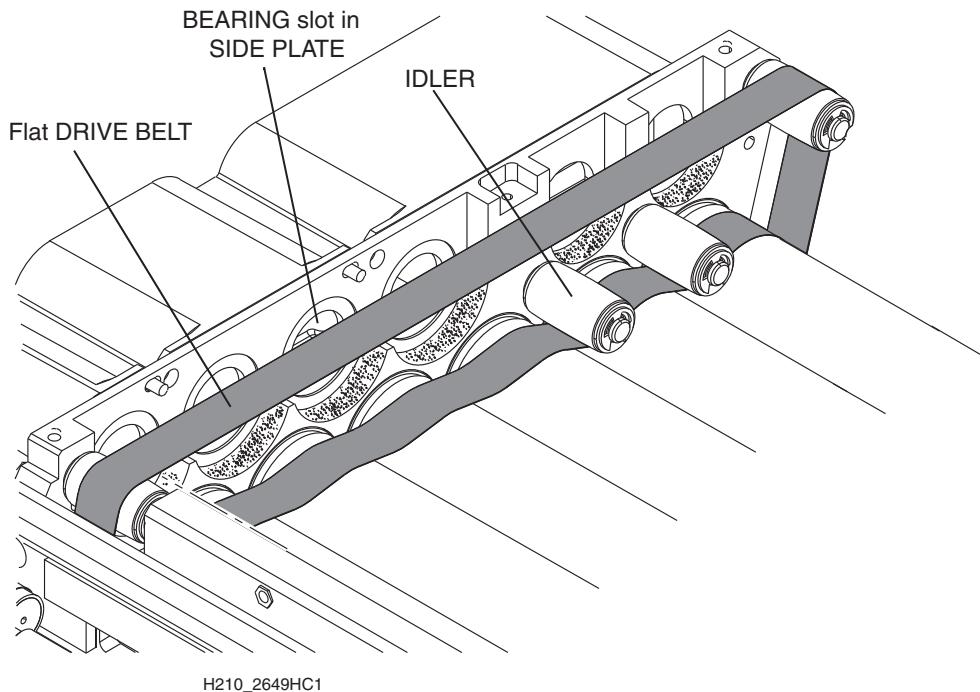
- 2 SCREWS
- TOP COVER

**4 Clean the underside of the COVER with ALCOHOL WIPES.****5 Inspect for “snow” on the top ROLLERS. Vacuum if necessary.**



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- 6 Remove:**
  - 2 SCREWS
  - BACK RETAINER BLOCK
  - 1 SCREW
  - FRONT RETAINER BLOCK
  - top ROLLERS and BEARINGS
- 7 Check for "snow" on the bottom ROLLERS. Vacuum if necessary.**



- 8 Check the flat DRIVE BELT for damage.
- 9 Does the BELT have damage?

Yes	No
<ol style="list-style-type: none"><li>a. Install a new DRIVE BELT, SP8F2850 (see BELT PATH LABEL).</li><li>b. Advance to <a href="#">Step 11</a>.</li></ol>	Continue with <a href="#">Step 10</a> .

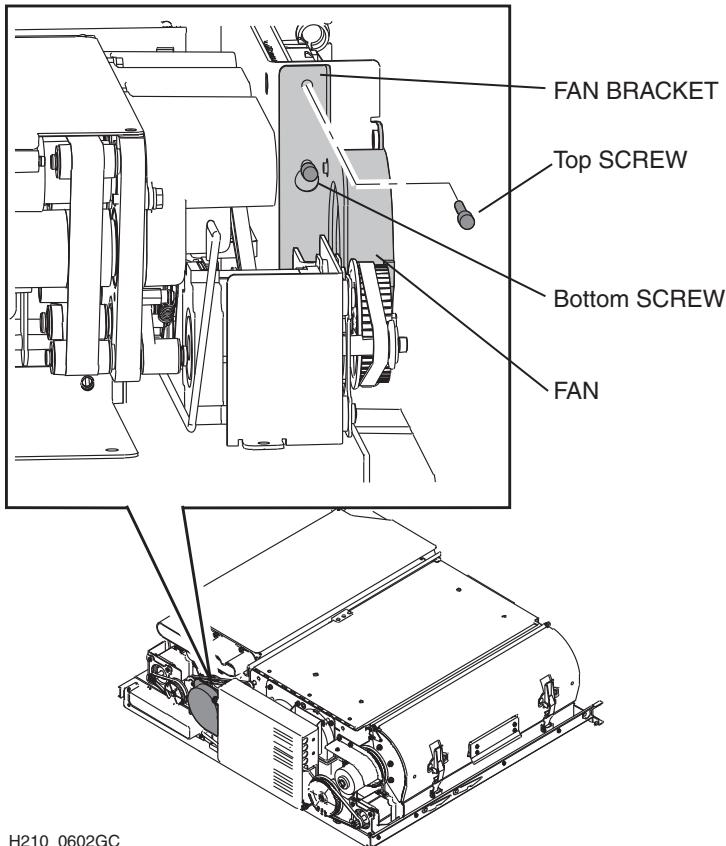
- 10 Clean the DRIVE BELT:
  - a Hold the BELT with an ALCOHOL WIPE.
  - b Use the PULLEY to advance the BELT.
- 11 Use an ALCOHOL WIPE to clean:
  - IDLERS
  - BEARING slots in the SIDE PLATE

**Important**

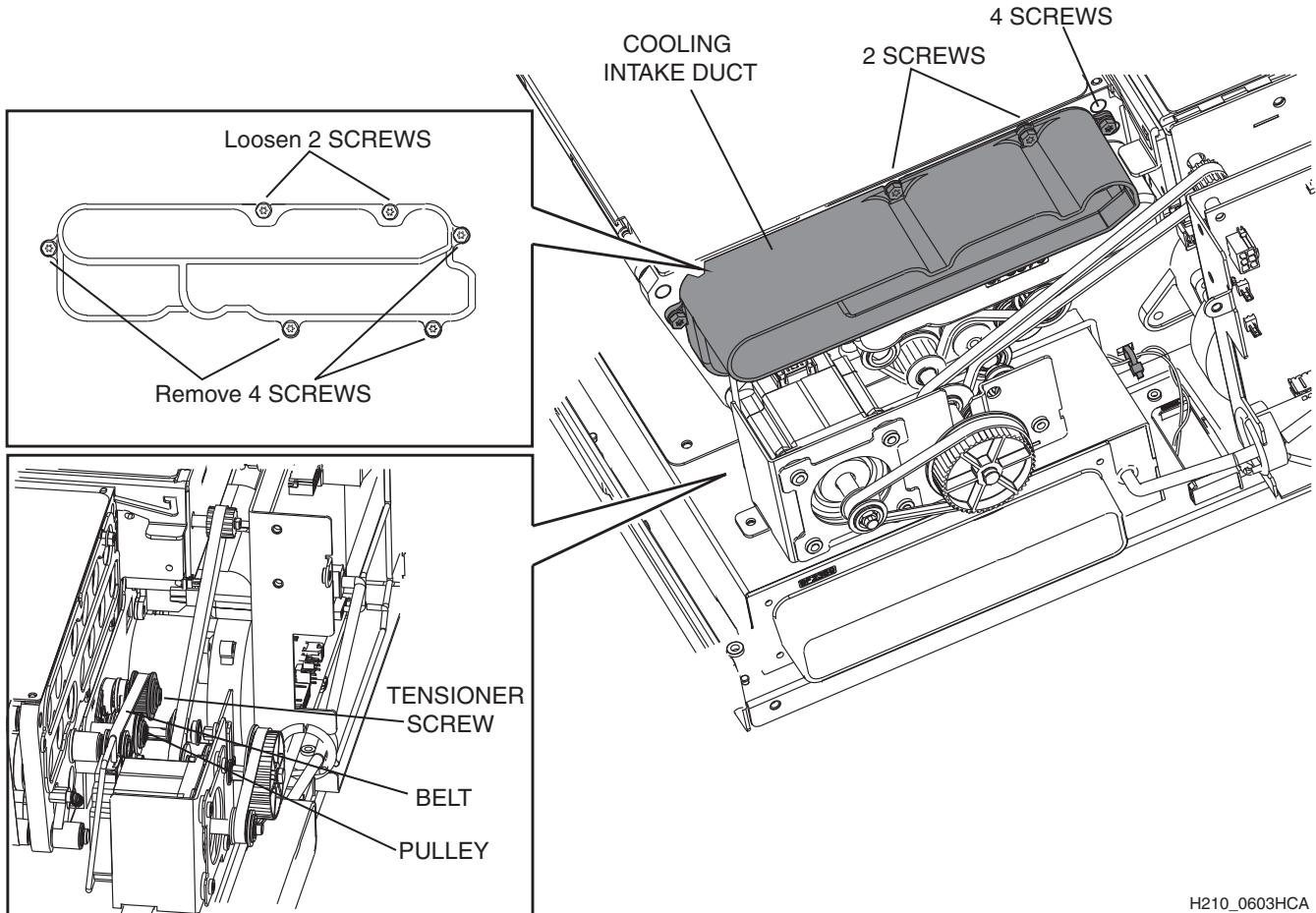
When installing the silver ROLLERS, place the recessed end toward the back.

**12** Install:

- top ROLLERS and BEARINGS
- BACK RETAINER BLOCK
- 2 SCREWS
- FRONT RETAINER BLOCK
- 1 SCREW
- COOLING COVER
- 2 SCREWS

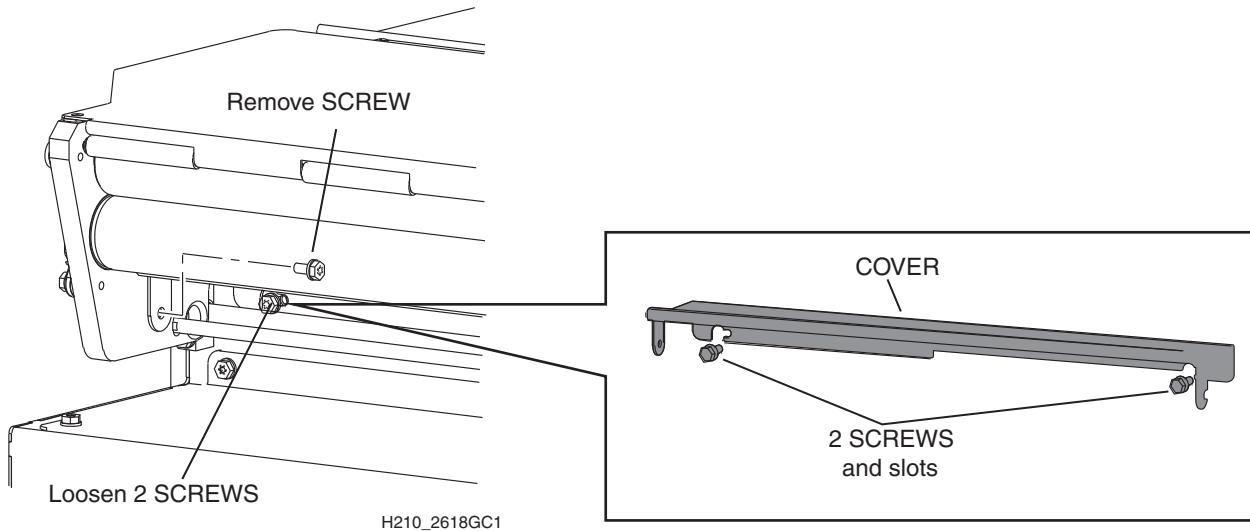
**13** Tilt the COOLING AY out of the way.

- a** From the back of the COOLING AY, remove the top FAN BRACKET SCREW.
- b** Loosen the bottom FAN BRACKET SCREW.
- c** Lift off the BRACKET and FAN, and set on top of the IMAGING AY.

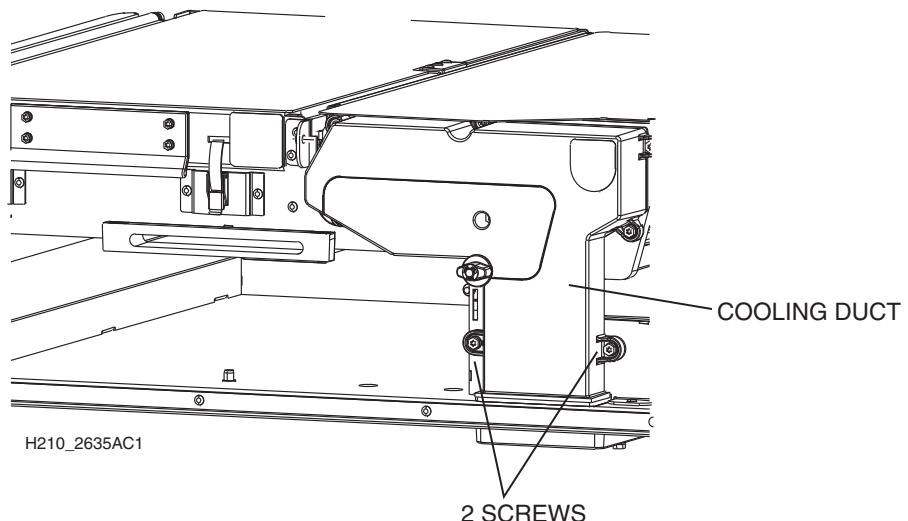


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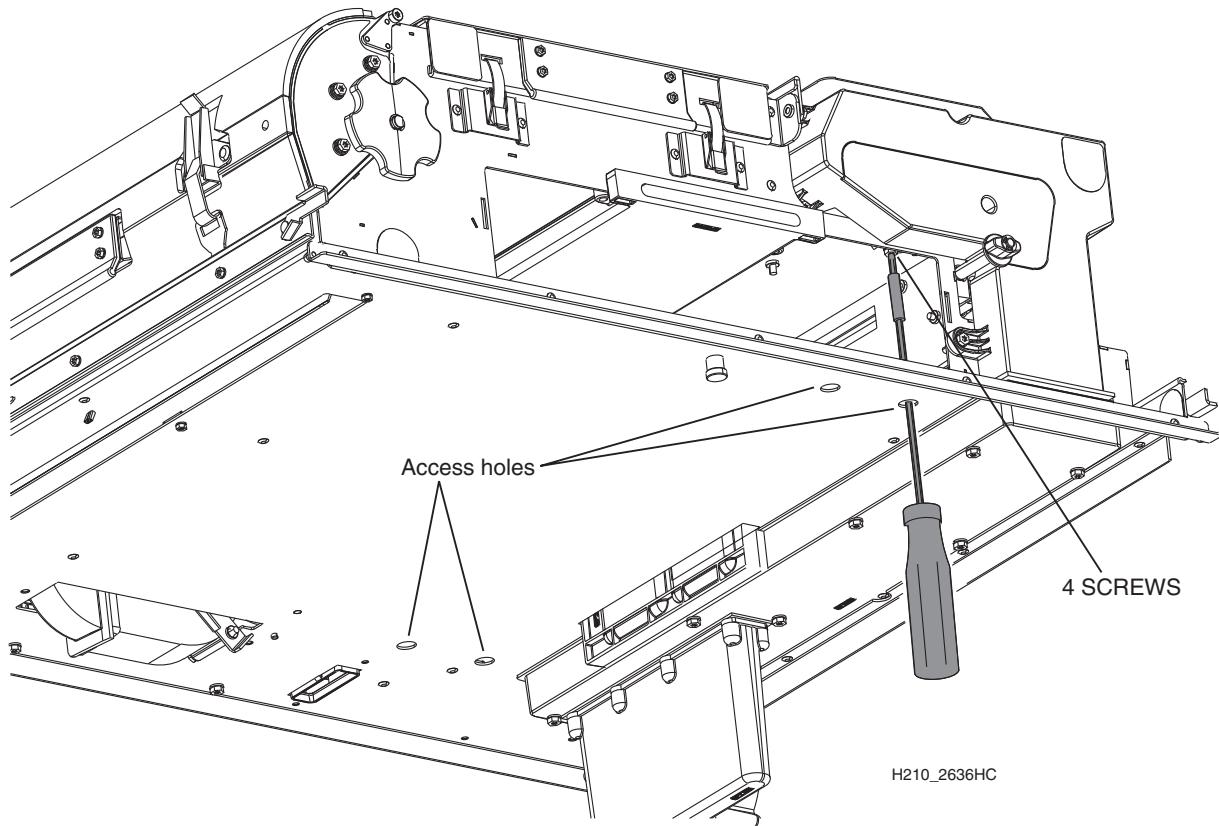
- d** Loosen the 2 SCREWS.
- e** Remove:
  - 4 SCREWS
  - COOLING INTAKE DUCT
- f** Loosen the TENSIONER SCREW.
- g** Disengage the BELT from the PULLEY.



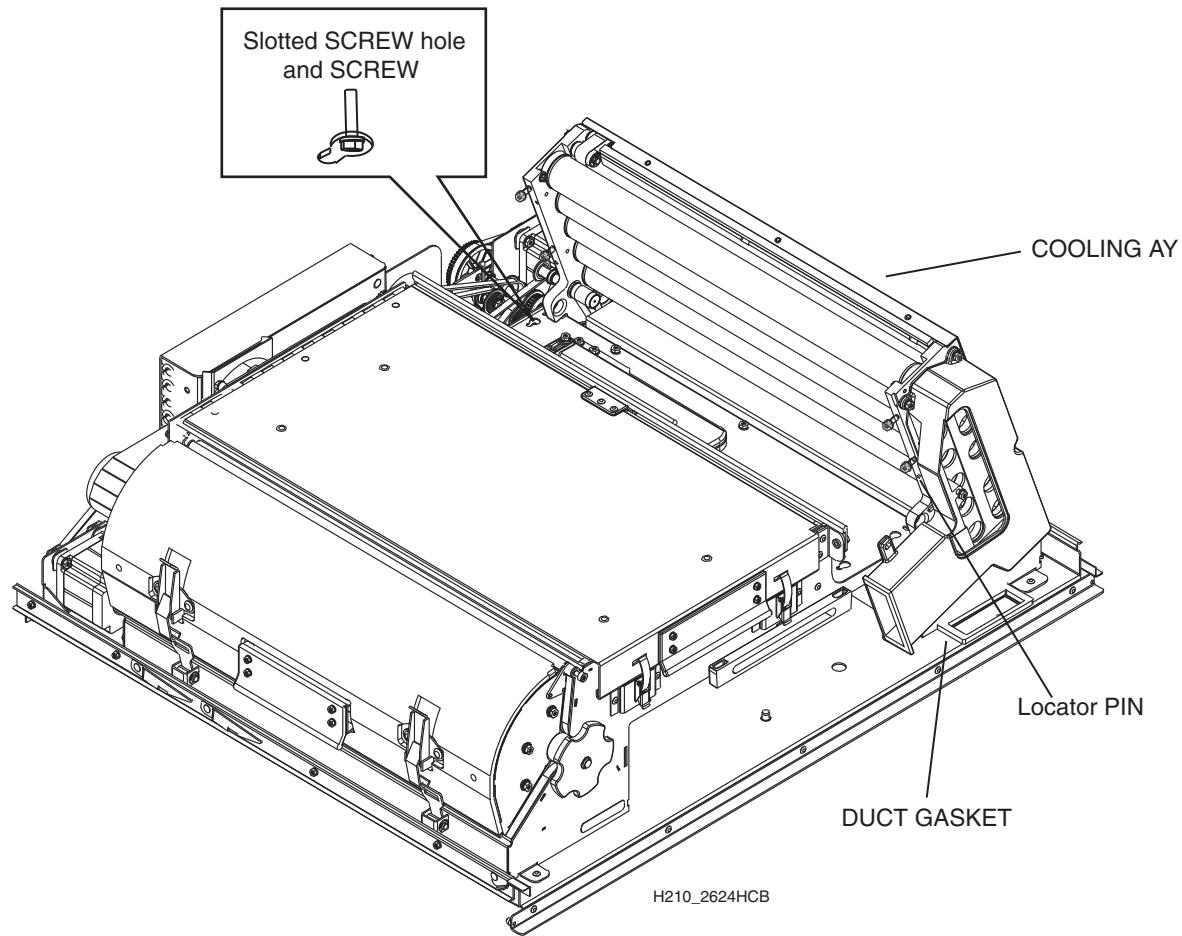
- h** Remove the SCREW.
- i** Loosen the 2 SCREWS.
- j** Slide the COVER to the right and remove it.



- k** From the front of the COOLING AY, remove the bottom 2 SCREWS from the COOLING DUCT.



- l** From inside the PMM compartment and through the 4 access holes, loosen the 4 SCREWS (2 in front and 2 in back) 4 or 5 turns.

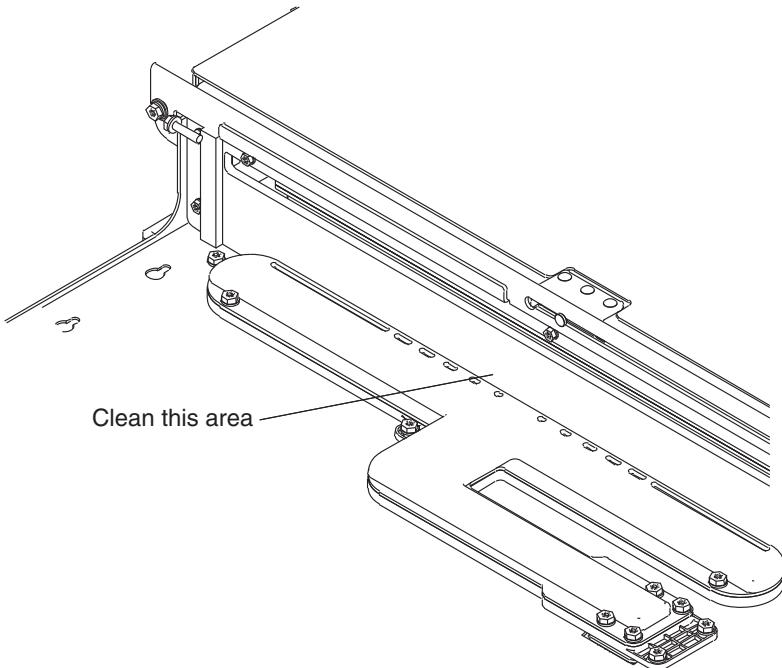
**Important**

When moving the COOLING AY, do not damage the DUCT GASKET.

- m** From the right side of the PROCESSOR, lift the COOLING AY to disengage it from the locator PINS, then pull the COOLING AY towards you to disengage the 4 bottom SCREWS from the slotted SCREW holes.
- n** Lift the COOLING AY on the side.

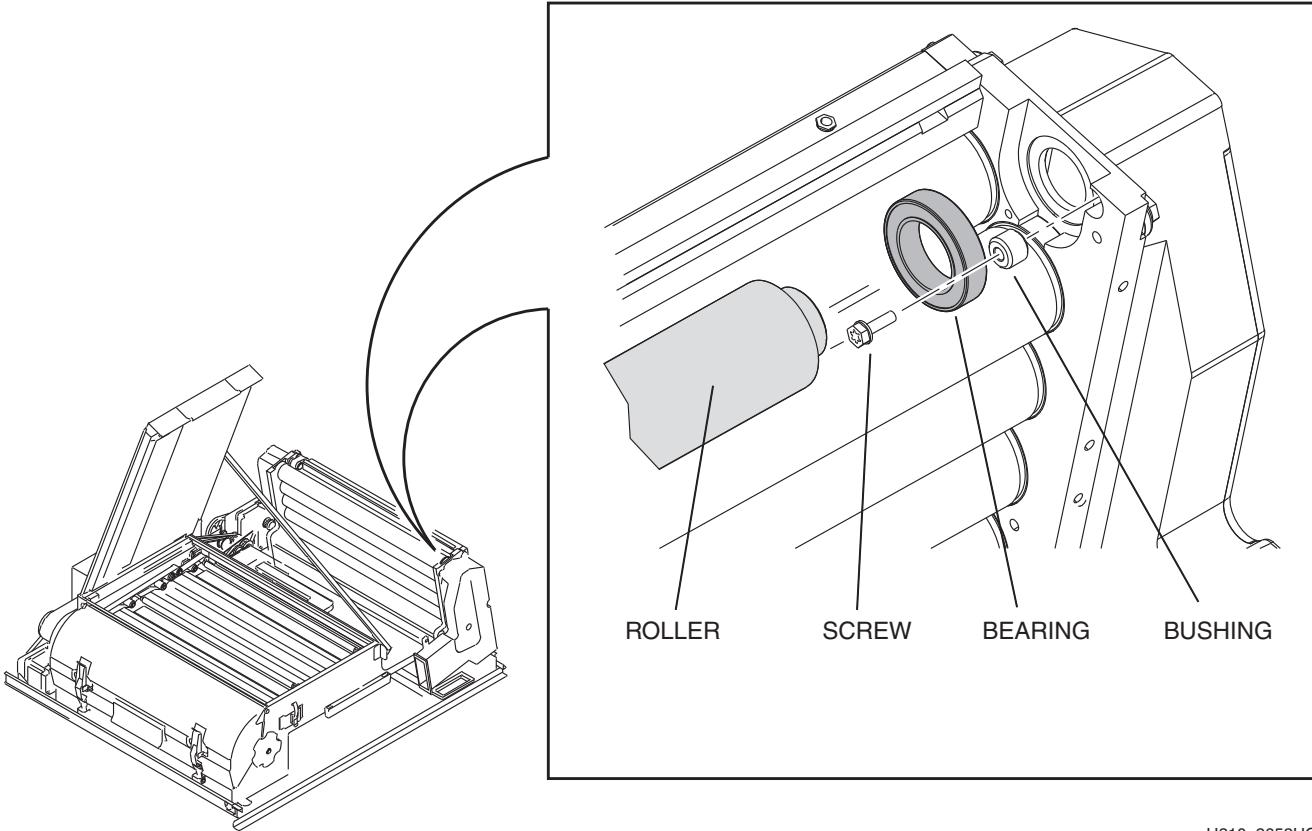
- 14** Is this PM for a 30,000 or 60,000 cycle interval?

30,000	60,000
Continue with <b>Step 15.</b>	Advance to <b>Installing a New COOLING ROLLER and EXHAUST DUCT.</b>



- 15** Clean all around the EXHAUST DUCT with an ALCOHOL WIPE.
- 16** Secure the COOLING AY (reverse the procedure in **Step 13**).
- 17** Lower the FLATBED COVER.
- 18** Engage the 2 LATCHES.
- 19** Install a new PMM.
- 20** Push the PROCESSOR back into the IMAGER.
- 21** Close the MAIN DOOR.
- 22** Do **Checking the Operation.**

## Installing a New COOLING ROLLER and EXHAUST DUCT

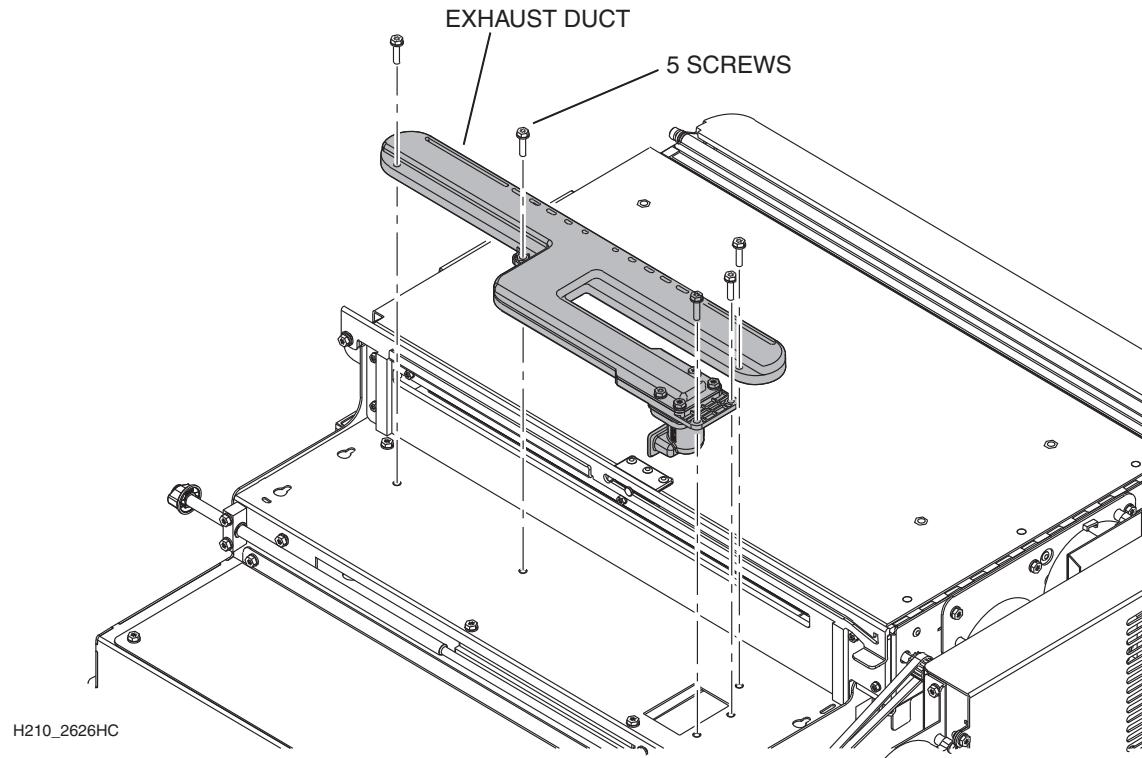


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- 1** From the front of the ROLLER, remove:
  - SCREW
  - BUSHING
- 2** Lift the ROLLER and 2 BEARINGS out.
- 3** Clean the BEARING slots in the SIDE FRAME with an ALCOHOL WIPE.

**4** Install:

- 2 BEARINGS
- new ROLLER
- front BUSHING
- front SCREW

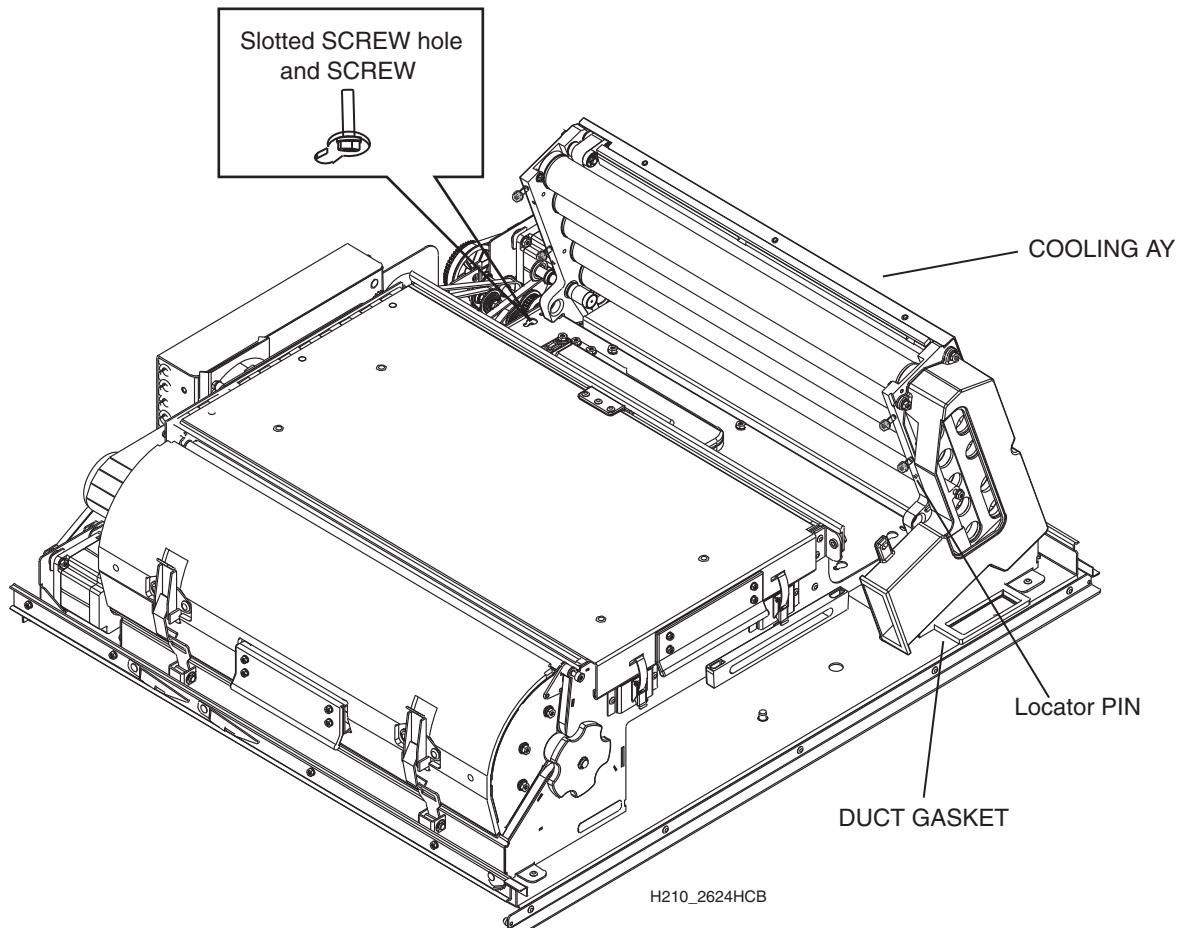
**5** Remove:

- 5 SCREWS
- EXHAUST DUCT

**6** Clean the surface below the EXHAUST DUCT with an ALCOHOL WIPE.

**7** Install:

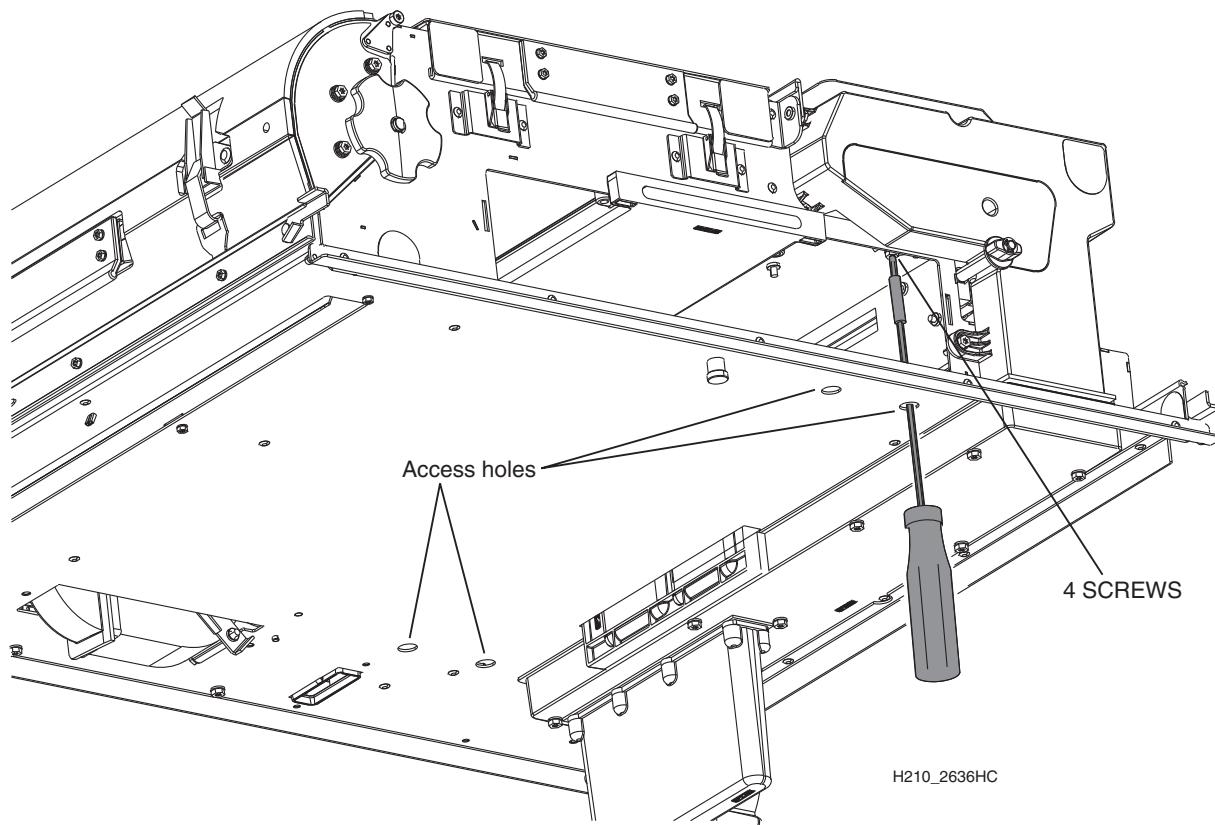
- EXHAUST DUCT
- 5 SCREWS

**8** Secure the COOLING AY.**Important**

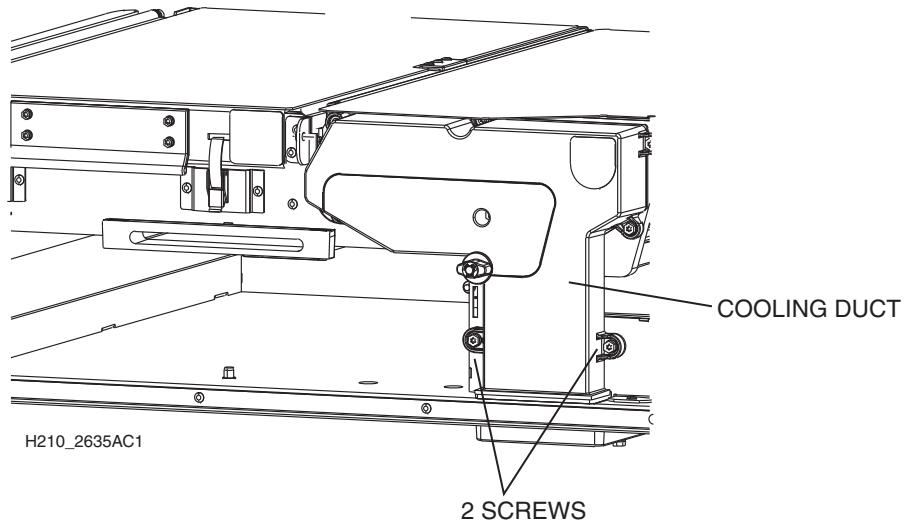
- Make sure the locator PINS and 4 SCREWS on the COOLING AY are located in the slots.

- Take care not to damage the DUCT GASKET.

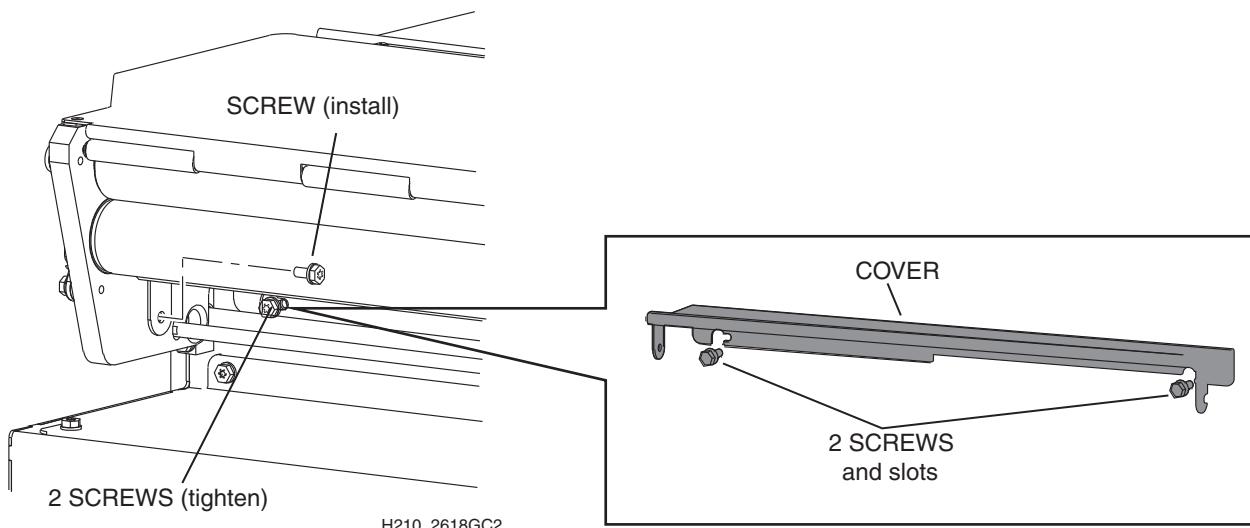
- a Set the COOLING AY in place.



- b From inside the PMM compartment, go through the 4 access holes and tighten the 4 SCREWS (2 in the front and 2 in the back).

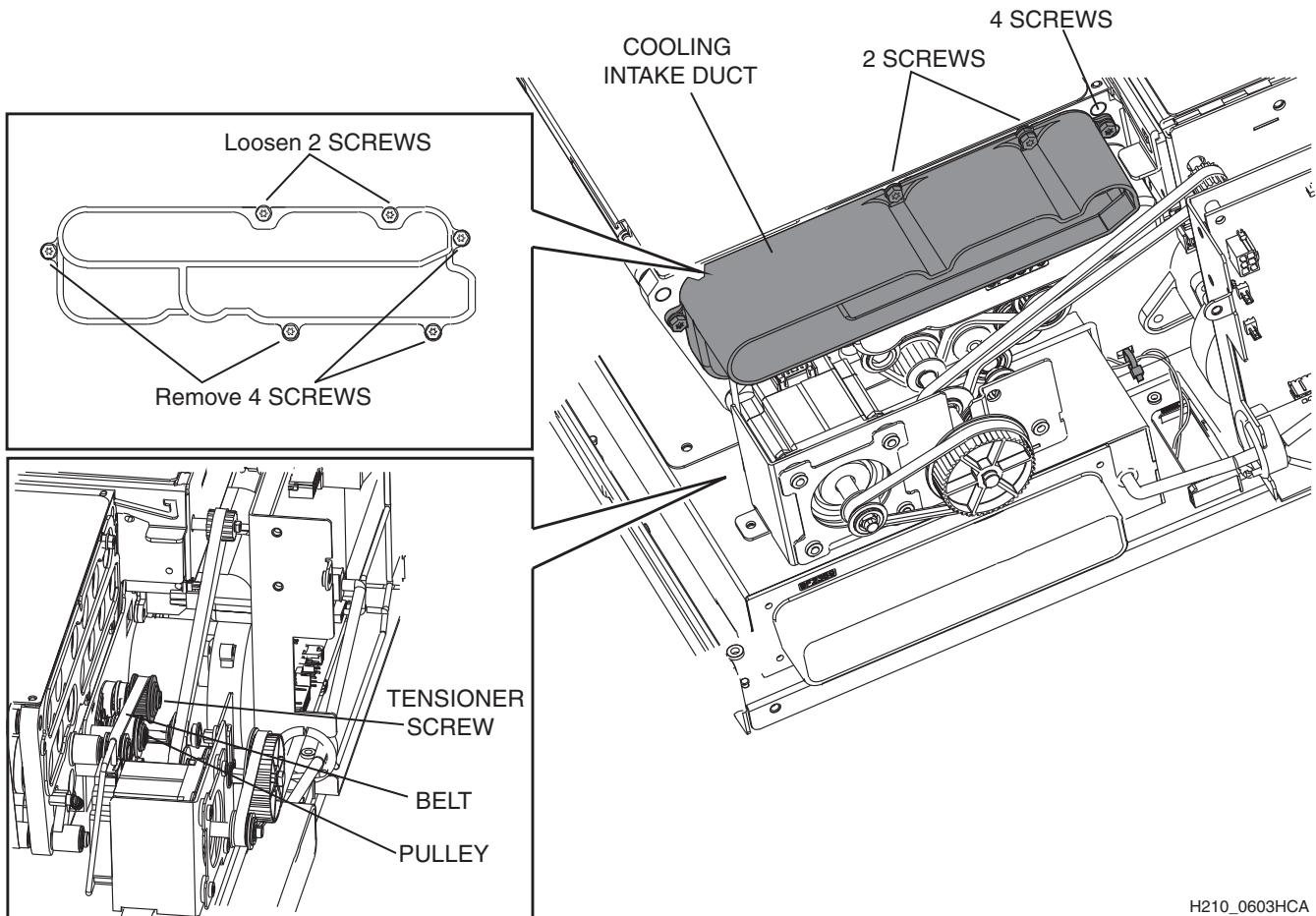


c Install 2 SCREWS in the COOLING DUCT.



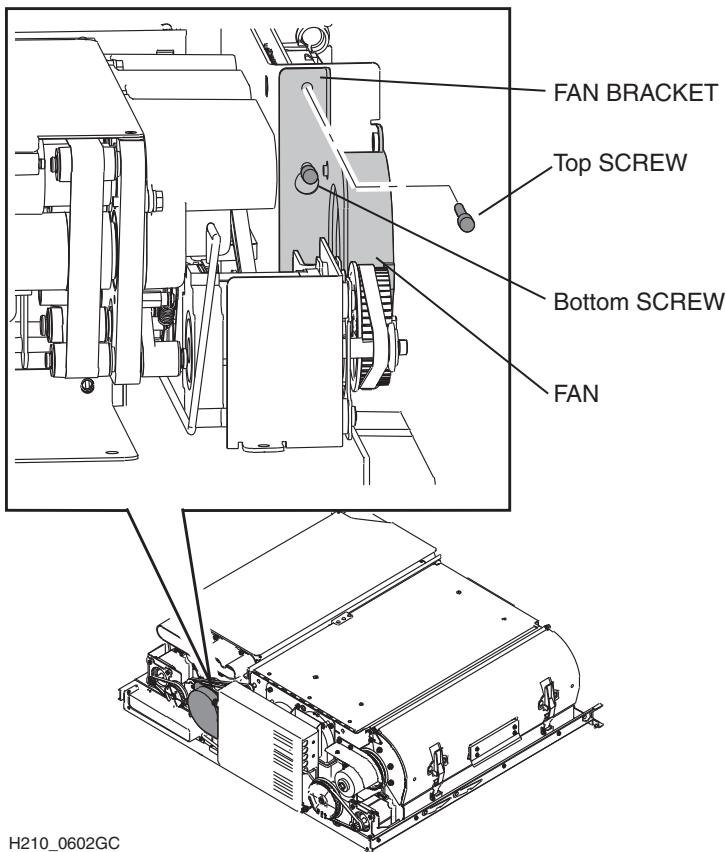
d Install the COVER and slide it to the left.

e Install the SCREW.



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- f Install the BELT on the PULLEY.
- g Tighten the TENSIONER SCREW.
- h Install:
  - COOLING INTAKE DUCT
  - 4 SCREWS
- i Tighten the 2 SCREWS.



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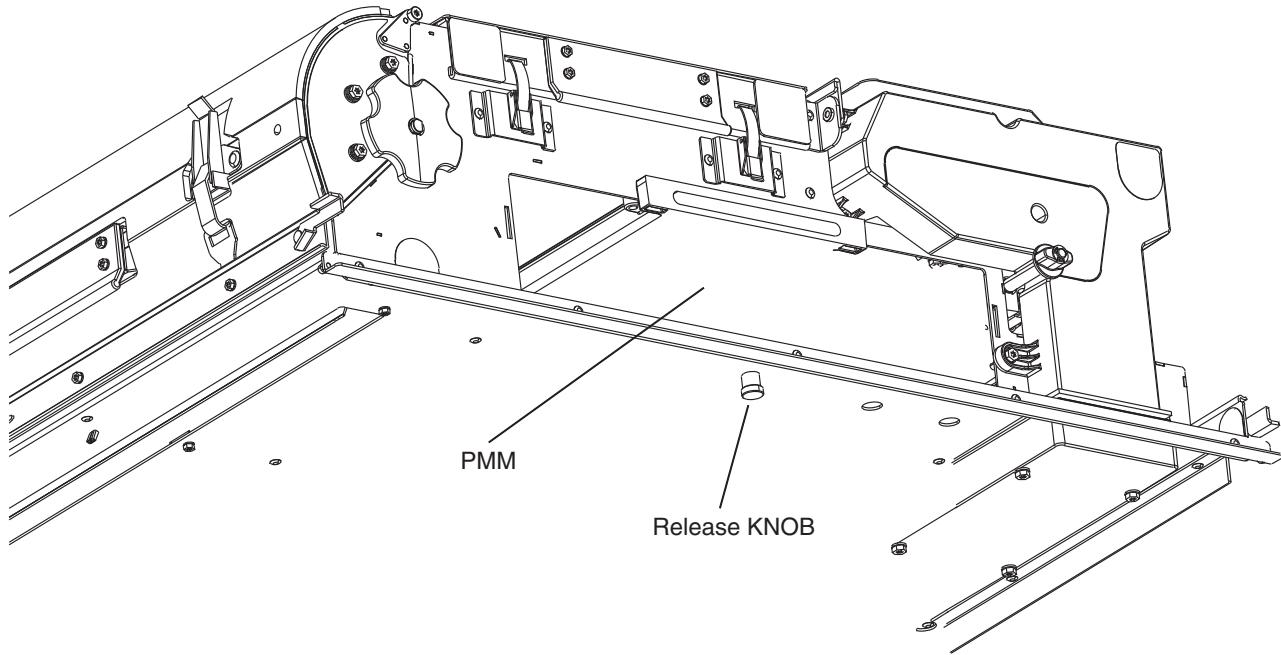
- j Set the BRACKET and FAN into position.
  - k Install the top FAN BRACKET SCREW.
  - l Tighten the bottom SCREW.
- 9** Install a new PMM.
- 10** Push the PROCESSOR back into the IMAGER.
- 11** Close the MAIN DOOR.
- 12** Do **Checking the Operation**.

## Installing a New PREVENTIVE MAINTENANCE MODULE (PMM)

**1** On the LOCAL PANEL, touch:

- “Unlock” icon
- [Unlock Film Supply]
- [OK]

**2** Open the MAIN DOOR.



**3** Pull down on the release KNOB.

**4** Remove the PMM.

**5** Install the new PMM.

**6** Close the MAIN DOOR.

**7** On the LOCAL PANEL, touch:

- [Utilities]
- [Change filter]
- [Log Filter Change]
- [Yes]
- [OK]
- [Main]

**Caution**

- Spent activated CHARCOAL FILTERS are not considered a special or hazardous waste in most regions.
- Contact local waste management authorities to determine if additional disposal requirements apply.

---

**8** Discard the old PMM.

## Checking the Operation

- 1 Connect the POWER CORD.
- 2 Energize the IMAGER by pressing the POWER BUTTON on the LOCAL PANEL.
- 3 Allow the PROCESSOR to warm to “READY.”
- 4 Connect the LAPTOP COMPUTER to the IMAGER.
- 5 Log on to the SERVICE TOOL.
- 6 Use the SERVICE TOOL and the TEMPERATURE METER KIT to check the temperature of the DRUM and FLATBED. See ADJUSTMENTS AND REPLACEMENTS, 8F2916:

Section	Procedure
Adjustments	<ul style="list-style-type: none"><li>• <a href="#">PROCESSOR - Temperature of DRUM</a></li><li>• <a href="#">PROCESSOR - Temperature of FLATBED</a></li></ul>

- 7 If necessary, adjust the temperature.
- 8 Make a “Flat-field” or “Grayout” test print.
- 9 Compare the test print with the test print made before the PM.
- 10 Make a print of a customer image.
- 11 Check the quality of the print with the customer.
- 12 Do [Resetting the PM Counts and Changing the Service History](#).

## Resetting the PM Counts and Changing the Service History

- 1 Use the SERVICE TOOL and select Configuration>Hardware>Installed Hardware to display the “MCS Hardware Configuration” screen.

The screenshot shows a Microsoft Internet Explorer window titled "Kodak Service WebLink - Microsoft Internet Explorer". The address bar shows the URL [http://localhost/ekservice\\_v21/default.asp](http://localhost/ekservice_v21/default.asp). The main content area is titled "MCS Hardware Configuration" for a "DryView 6800". On the left, there is a navigation tree with the following nodes:

- Configuration
  - DICOM SCP
  - Hardware
    - Installed Hardware
    - Local Panel
    - Optics
    - Processor Configuration
  - Service
  - System
  - Diagnostics
  - Hardware Data
  - Logs
  - Monitoring and Control
  - System Information
  - Upgrade
  - Utilities

The "Hardware Installed" section contains fields for specifying installed hardware components:

- Sorter: YES (checkbox checked)
- Upper Drawer: YES (checkbox checked)
- Middle Drawer: YES (checkbox checked)
- Lower Drawer: NO (checkbox checked)

The "Film Options" section contains fields for specifying supported film options:

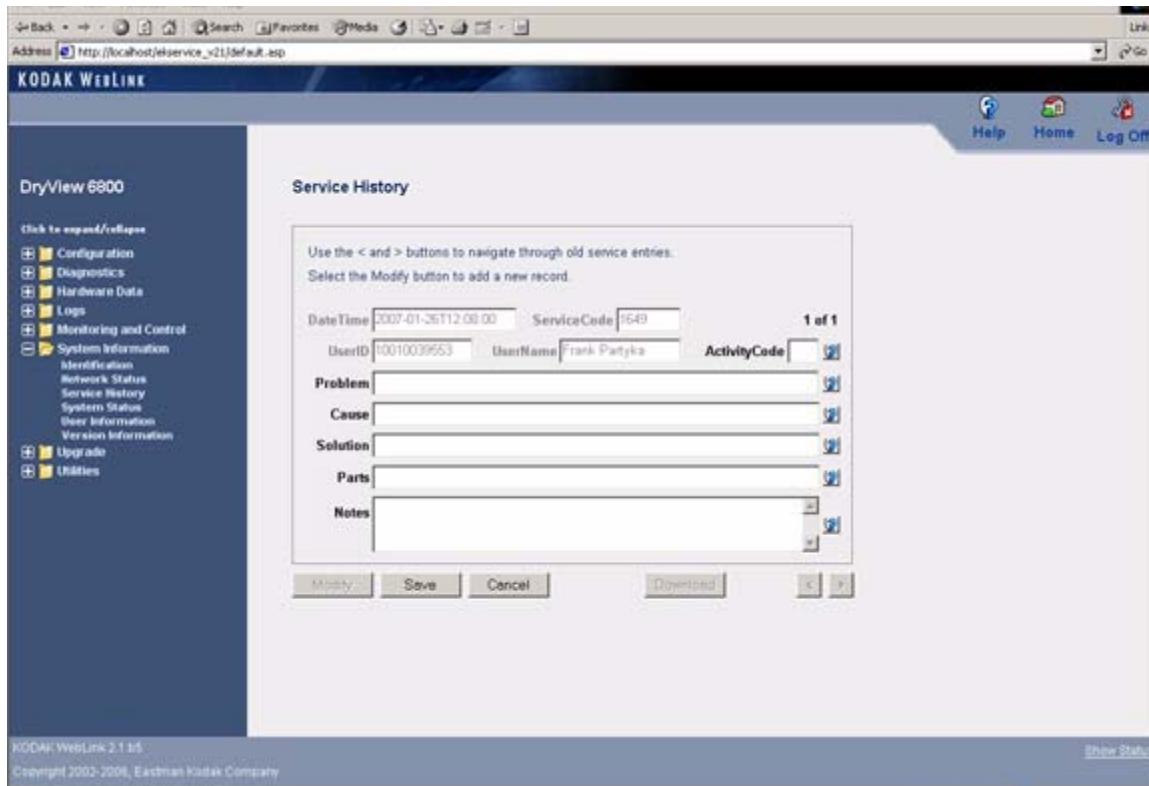
- Clear: YES (checkbox checked)
- Blue: YES (checkbox checked)
- Blue Plus: YES (checkbox checked)
- CE Mark: YES (checkbox checked)

The "Print Counts Reset" section allows resetting print counts to selected values:

- Prints to PM: 10000 (dropdown menu)
- Prints to Processor Filter Change: 25000 (dropdown menu)

At the bottom of the page, there are links for "Show Status" and "Local intranet".

- 2 In the “Print Counts Reset” area:
  - a. Set the “Prints to PM” to **30,000**.
  - b. Click [Reset].
  - c. Set the “Prints to Processor Filter Change” to **15,000**.
  - d. Click [Reset].
- 3 Select **System Information>Service History** to display the “Service History” log.



- 4 Click [Modify].

 **Note**

The fields for “Date Time”, “Service Code”, “UserID”, and “User Name” will be entered automatically.

**5 Enter:**

- “Activity Code”: **PM**
- “Problem”: **PM due**
- “Cause”: **N/A**
- “Solution”: **N/A**
- “Parts”: part number and description of any part that was replaced
- “Notes”: the type of PM done (30K or 60K), and any information about the PM

 **Note**

This information will be reviewed by the Field Engineer at the start of the next PM to determine which type of PM to do.

**6 Click [Save].**

- 7 To download the Service History to a file on the HARD DRIVE of your LAPTOP COMPUTER, click [Download].**
- 8 Store the file in a selected folder.**
- 9 Do [Completing the PM](#).**

## Completing the PM

- 1** Log off from the SERVICE TOOL.
- 2** Disconnect the LAPTOP COMPUTER from the IMAGER.
- 3** Install:
  - ELECTRONICS FILTER
  - 2 SCREWS
- 4** Close the AIR INTAKE DOOR.
- 5** Place all used ALCOHOL WIPES in a BAG, SP78999828680, and discard.
- 6** Leave the extra PMM with the customer.

## Publication History

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